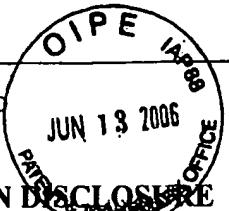


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**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

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Sheet

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of

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		Complete if Known	
Application Number	10/673,438		
Filing Date	September 30, 2003		
First Named Inventor	Rowley		
Group Art Unit	1651		
Examiner Name	Naff, David M.		
Attorney Docket Number	P-5645P1 (035510/296472)		

**U. S. PATENT DOCUMENTS**

Examiner Initials*	Cite No.	Document Number Number - Kind Code (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages of Relevant Figures Appear
<i>dm</i>	1	US-5,766,631	06-1998	Arnold	424/448b
<i>dm</i>	2	US-5,866,165	02-1999	Liu et al.	424/48b
<i>dm</i>	3	US-2003/0095993	05-2003	Bentz et al.	424/42b
<i>dm</i>	4	US-2003/0032203	02-2003	Sabatini et al.	434/518
<i>dm</i>	5	US-5,747,027	05-1998	Stern et al.	424/94, 62

**FOREIGN PATENT DOCUMENTS**

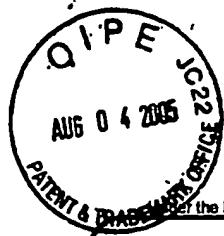
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<i>dm</i>	6	DOILLON, C.J., et al., "Fibroblast Growth on a Porous Collagen Sponge containing Hyaluronic Acid and Fibronectin," <i>Biomaterials</i> , 1987, pp. 195-200., Vol. 8.	
<i>dm</i>	7	HUANG-LEE, L.L.H., et al., "Crosslinked CNBr-Activated Hyaluronan-Collagen Matrices: Effects of Fibroblast Contraction," <i>Matrix Biology</i> , 1994, pp. 147-157, Vol. 14.	
<i>dm</i>	8	MIDDELKOOP E., et al., "Adherence, Proliferation and Collagen Turnover by Human Fibroblasts Seeded onto Different Types of Collagen Sponges," <i>Cell Tissue Res.</i> , 1995, pp. 447-453, Vol. 280.	

Examiner Signature	<i>dm</i>	W. M. W.	Date Considered	9/14/04
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## **INFORMATION DISCLOSURE STATEMENT BY APPLICANT**

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of

**Complete if Known**

Application Number	10/673,438
Filing Date	September 30, 2003
First Named Inventor	Rowley et al.
Art Unit	1651
Examiner Name	TBD
Attorney Docket Number	P-5645P1

Attorney Docket Number P-5645P1

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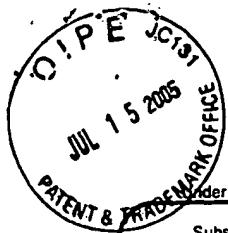
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Sheet 1 of 2

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Application Number	10/673,438
Filing Date	9-30-2003
First Named Inventor	Rowley et al.
Art Unit	1651
Examiner Name	TBD
Attorney Docket Number	P-5645P1

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<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(Use as many sheets as necessary)</i>				Application Number	10/673,438
				Filing Date	9-30-2003
				First Named Inventor	Rowley et al.
				Art Unit	1651
				Examiner Name	TBD
Sheet	2	of	2	Attorney Docket Number	P-5645P1

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
<i>dw</i>		KOWALCZYN SKA, Adsorption characteristics of human plasma fibronectin in relationship to cell adhesion, Journal of Biomedical Materials Res. 61, no. 2, 2002, pp. 260-269	
<i>dw</i>		CHEN, Hybrid Biomaterials for Tissue Engineering: A Preparative Method for PLA or PLGA- Collagen Hybrid Sponges, Advanced Materials, 12, no. 6, 2000, pp. 455-457	
<i>dw</i>		WOO, Enhance. of Fibronectin- and Vitronectin-Adsorption to Polymer/Hydroxyapatite Scaffolds Suppresses the Apoptosis of Osteoblasts, J. of Bone and Min. Res., 17, 1, 2002,	
<i>dw</i>		NOISET, Fibronectin Adsorption or/and Covalent Grafting on Chemically Modified Peek Film Surfaces, J. Biomater. Sci. Polymer Edn., 10, no. 6, pp. 657-677, 1999	
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<i>dw</i>		LEE, Preparation and Characteristics of Hybrid Scaffolds composed of beta-chitin and Collagen, Biomaterials 25, no. 12, 2004, pp. 2309-2317	
<i>dw</i>		CARBONETTO, Nerve Fiber Growth on Defined Hydro Gel Substrates, Science 216, no. 4548, 1982, pp. 897-899	
<i>dw</i>		International Search Report, PC/US2004/027865, Mailed April 4, 2005.	

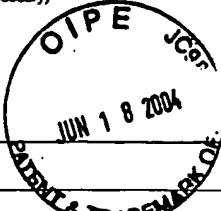
Examiner Signature	<i>dw</i>	Date Considered	9/14/06
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Complete if Known

<b>Application Number</b>	10/673,438
<b>Filing Date</b>	September 30, 2003
<b>First Named Inventor</b>	Rowley, Jon
<b>Group Art Unit</b>	1651
<b>Examiner Name</b>	Unknown

Sheet 1 of 1

Attorney Docket No: 0709.011.0003

**US PATENT DOCUMENTS**

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**FOREIGN PATENT DOCUMENTS**

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an	WO-WO 01/49824 A	07/12/2001	Domachuk et al			
an	WO-WO 97/17038 A	05/15/1997	Vacanti			
an	WO-WO0/61668 A	10/19/2000	Elseit et al			
an	WO-WO01/66695	09/13/2001	Gruskin et al			

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an		PCT International Search Report for International Application No. PCT/US 03/30649	

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Sheet 1

of 3

**Complete if Known**

Application Number	10/673,438
Filing Date	09/30/2003
First Named Inventor	HEIDARAN et al.
Art Unit	
Examiner Name	

Commodity Docket Number P-5645P1

**U. S. PATENT DOCUMENTS**

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		Application Number	10/673,438
		Filing Date	09/30/2003
		First Named Inventor	HEIDARAN et al.
		Art Unit	
		Examiner Name	
Sheet	2	of	3
		Attorney Docket Number	P-5645P1

NON PATENT LITERATURE DOCUMENTS			
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<i>an</i>		CHUNG et al, Biomaterials (2003) 23:2827-2834.	
<i>an</i>		DRAGET et al., Int J. Biol. Macromolecules (1997) 21:47-55.	
<i>an</i>		KIM et al. Fibers and Polymers (2001) 2:64-70.	
<i>an</i>		KOBAYASHI et al., Biomaterials (1991) 12:747-51.	
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<i>an</i>		MATSUDA et al., ASAIO J, (1993) 39:M327-31.	
<i>an</i>		MATSUDA et al., ASAIO J, (1992) 38:M154-7.	
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<i>an</i>		MOGHADDAM et al., ASAIO Trans, (1991) 37:M437-8.	
<i>an</i>		PARK et al., Nature Biotechnology (2002) 20:1111-17.	

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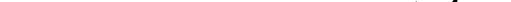
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				<b>Application Number</b>	10/673,438
				<b>Filing Date</b>	09/30/2003
				<b>First Named Inventor</b>	HEIDARAN et al.
				<b>Art Unit</b>	
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Sheet	3	of	3	Attorney Docket Number	P-5645P1

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an		PETRONIS et al., Journal of Materials Science: Materials in Medicine (2001) 12:523-28.	
an		PRESTWICH et al., J. Controlled Release (1998) 53:93-103.	
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an		SMIDSROD et al., Trends in Biotech., (1990) 8:71-78.	
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Sheet

1

of

7

## Complete If Known

Application Number	10/673,438
Filing Date	September 30, 2003
First Named Inventor	Jon Rowley et al.
Art Unit	1651
Examiner Name	Unassigned
Attorney Docket Number	020187.239PTUS

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<i>DR</i>	1	ALSBERG E, et al., "Cell-interactive Alginate Hydrogels for Bone Tissue Engineering," J. Dent. Res. 80(11):2025-9. November 2001	
<i>DR</i>	2	ALSBERG E, et al., "Engineering Growing Tissues", Proc. Natl. Acad. Sci. U. S. A. 99(19):12025-30. September 2002.	
<i>DR</i>	3	BALGUIDE A, et al., "Agarose Gel Stiffness Determines Rate of DRG Neurite Extension in 3D Cultures," Biomaterials. 22(10):1077-84(2001).	
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<i>DR</i>	5	BHATIA S et al., "Tissue Engineering at the Micro-scale," Biomed. Microdevices. 2(2):131-44(March 1999).	
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<i>DR</i>	7	BRYANT S, et al., "Controlling the Spatial Distribution of ECM Components in Degradable PEG Hydrogels for Tissue Engineering Cartilage," J. Biomed. Mater. Res. 64A(1):70-9(January 2003).	
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<i>DR</i>	11	CUKIERMAN E, et al., "Cell Interactions with Three-Dimensional Matrices," Curr. Opin. Cell Biol. 14:633-39(2002).	
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<i>DR</i>	13	DAR A, et al. "Optimization of Cardiac Cell Seeding and Distribution in 3D Porous Alginate Scaffolds," Biotechnol. Bioeng. 80(3):305-12(November 2002).	

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Application Number	10/673,438
Filing Date	September 30, 2003
First Named Inventor	Jon Rowley et al.
Art Unit	1651
Examiner Name	Unassigned
Attorney Docket Number	020187.0239PTUS

### NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
Jon	14	DIMILLA P, et al., "Maximal Migration of Human Smooth Muscle Cells on Fibronectin and Type IV Collagen Occurs at an Intermediate Attachment Strength," J. Cell. Biol. 122(3):729-37(August 1993).	
Jon	15	DRUMHELLER P, et al., "Polymer Networks with Grafted Cell Adhesion Peptides for Highly Biospecific Cell Adhesive Substrates," Anal. Biochem. 222:380-88(1994).	
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Jon	17	ELISSEEFF J, et al., "Controlled-Release of IGF-I and TGF- $\beta$ 1 in a Photopolymerizing Hydrogel for Cartilage Tissue Engineering," J. Orthop. Res. 19(6):1098-104(2001).	
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Jon	20	GLICKLIS R, et al., "Hepatocyte Behavior within Three-dimensional Porous Alginate Scaffolds," Biotechnol. Bioeng. 67(3):344-53(February 2000).	
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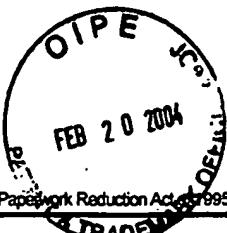
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<i>DRW</i>	37	KIM W, et al., "Cartilage Engineered in Predetermined Shapes Employing Cell Transplantation on Synthetic Biodegradable Polymers," Plastic and Reconstructive Surgery 94(2):233-37(August 1994).	
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First Named Inventor	Jon Rowley et al.
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DRW	62	PALECEK S, et al., "Integrin-Ligand Binding Properties Govern Cell Migration Speed Through Cell-Substratum Adhesiveness," <i>Nature</i> 385(6616):537-40(February 1997).	
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<i>dm</i>	77	SHAPIRO L, et al., "Novel Alginate Sponges for Cell Culture and Transplantation," <i>Biomaterials</i> 18(8):583-90(1997).	
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<i>dm</i>	81	TIMMINS M, et al., "Monitoring the Oxygen Consumption Rates of Cells in Culture," <i>BD The Cell/Line</i> 12(1):8-11(2002).	
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<i>dm</i>	84	WAHLGREN M, et al., "Protein Adsorption to Solid Surfaces," <i>Trends Biotechnol.</i> 9(6):201-8(June 1991).	
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<sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.88. The information is required to obtain or retain a benefit by the public which is to file an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 120 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450.